

What is this thing called ?global warming??

The record-setting frigid air we're suffering is actually the result of global warming, some meteorologists are saying.

It doesn't feel that way. Last week, the U.S. National Oceanic and Atmospheric Administration (NOAA) warned that millions of Americans from Montana down to as far south as Alabama would be putting their lives at risk if they ventured out for any length of time into brutally cold conditions that are driving temperatures to their lowest in 20 years.

It predicted that wind chills could be between minus 37C and 46C ? as low as -50F. The unusual drop in temperature was blamed on a Polar (or Arctic) Vortex, apparently not an unusual phenomenon but plain old cyclones in the stratosphere, but the effects this time around are unusually harsh.

We are feeling the effects in Dufferin and the rest of southern Ontario, where wind chills dropped to as low as minus 40, including Orangeville and other parts of Dufferin.

But a single winter cold air outbreak doesn't negate the reality of global warming, says Michael Mann, a climatologist and director of the Earth System Science Centre at Pennsylvania State University.

?If you take a step back and look at how extreme temperatures are actually changing over time, you see that in North America over the past decade, we have broken all-time records for warmth at twice the rate as records for cold,? Mr. Mann is quoted in media reports as saying.

A month ago, ?we reported the warmest conditions the globe has ever seen in November, and Australia is in the midst of a record heat wave to finish out what we have now learned was the warmest year on record for the entire continent of Australia.?

Meantime, some researchers say the Polar ice cap is shrinking, while others say it is expanding. Paradoxically, they can both offer data in support of their divergent conclusions.

Evidently, the cap has been receding but periodically growing, such that the shrinkage is more of an average than an absolute at any given time.

What difference does it really make?

If you scan numerous websites, you'll find a majority agree that open sea areas have increased. As a result, more sunlight is being absorbed by seas and less reflected by ice surfaces.

As a result, the Arctic waters are warming. This is theorized to have had effects on the jet stream, causing cold Arctic air to move more rapidly south. The warmer water has been documented to have attracted more southerly species, threatening the marine biology.

Alaska is warmer than usual. Warming in Arctic regions is said to free methane from beneath the permafrost.

Methane, a gas also released consistently from many old landfill sites including several rehabilitated into relatively large parks in Toronto, and also from beat bogs and marshes (swamp gas, CO4), has 72 times the greenhouse effect that an identical amount of carbon dioxide would have.

?If the same mass of methane and carbon dioxide were introduced into the atmosphere, that methane will trap 72 times more heat than the carbon dioxide over the next 20 years,? Wikipedia says, quoting official sources.

By Wes Keller

